

We claim,

1. A medical device, comprising:
  - a) a first biomaterial;
  - b) the first biomaterial having an aperture extending therethrough;
  - c) the first biomaterial also having an extension; and
  - d) wherein the extension is shaped to be inserted into the aperture.
2. The medical device of claim 1, wherein the first biomaterial comprises at least one of a submucosal tissue, mucosal tissue, collagen, partially collagenous biomaterial, polytetrafluoroethylene, polyester, stainless steel, DACRON, ORLON, FORTISAN, nylon, polypropylene, polyglactin 910, polyglycolic acid, pericardium, dura tissue, facia lata, a biocompatible material, a synthetic material, polymers, co-polymers, and any combination or part thereof.
3. The medical device of claim 1, wherein the device comprises a plurality of apertures.
4. The medical device of claim 1, wherein the extension is larger than the aperture.
5. The medical device of claim 1, wherein the extension has a generally rectangular shape.
6. The medical device of claim 5, wherein a width of the extension is greater than a width of the aperture.
7. The medical device of claim 1, wherein the device comprises a plurality of extensions.
8. The medical device of claim 1, wherein the device comprises a plurality of extensions and a plurality of apertures.

9. The medical device of claim 8, wherein the extensions have a generally rectangular shape.
10. The medical device of claim 1, wherein the extensions include a retainer.
11. The medical device of claim 1, wherein the first biomaterial comprises collagenous material, a plurality of extensions, and a plurality of apertures.
12. The medical device of claim 11, wherein the extensions have a generally rectangular shape.
13. The medical device of claim 1 further comprising a second biocompatible material disposed on the first biomaterial.
14. The medical device of claim 13, wherein an intermediate layer is disposed under the second biocompatible material.
15. The medical device of claim 14, wherein at least one of the second biocompatible material and intermediate layer comprises at least one of a submucosal tissue, mucosal tissue, collagen, partially collagenous biomaterial, polytetrafluoroethylene, polyester, stainless steel, DACRON, ORLON, FORTISAN, nylon, polypropylene, polyglactin 910, polyglycolic acid, pericardium, dura tissue, fascia lata, a biocompatible material, polymers, co-polymers, a synthetic material, and any combination or part thereof.
16. A medical device, comprising:
- a) a tube, the tube having a lumen extending therethrough; and
  - b) wherein the lumen includes a first extension adjacent to a first aperture.
17. The medical device of claim 16, wherein the tube comprises at least one of a submucosal tissue, mucosal tissue, collagen, partially collagenous

biomaterial, polytetrafluoroethylene, polyester, stainless steel, DACRON, ORLON, FORTISAN, nylon, polypropylene, polyglactin 910, polyglycolic acid, pericardium, dura tissue, facia lata, a biocompatible material, a synthetic material, polymers, co-polymers, and any combination or part thereof.

18. The medical device of claim 17, wherein the tube includes a plurality of extensions.
19. The medical device of claim 17, wherein the tube includes a plurality of apertures.
20. The medical device of claim 16, wherein the tube includes a plurality of extensions and apertures, the extensions being inserted into the apertures.
21. The medical device of claim 20, wherein at least one of the plurality of extensions is larger than at least one of the plurality of apertures.
22. The medical device of claim 16, wherein a second biocompatible material is disposed on the tube
23. The medical device of claim 22, wherein an intermediate layer is disposed under the second biocompatible layer.
24. The medical device of claim 23, wherein the intermediate layer comprises at least one of a submucosal tissue, mucosal tissue, collagen, partially collagenous biomaterial, polytetrafluoroethylene, polyester, stainless steel, DACRON, ORLON, FORTISAN, nylon, polypropylene, polyglactin 910, polyglycolic acid, pericardium, dura tissue, facia lata, a biocompatible material, a synthetic material, polymers, co-polymers, and any combination or part thereof.

25. The medical device of claim 16, wherein the extension also includes a retainer.

26. A method of creating a tube, comprising the steps of:

- a) forming at least one extension and at least one aperture on a sheet of biocompatible material;
- b) inserting the at least one extension into the at least one aperture; and
- c) engaging the at least one extension with the at least one aperture.

27. The method of creating a tube of claim 31, wherein the steps further includes the step of disposing an intermediate layer on the tube.

28. The method of creating a tube of claim 27, wherein the steps further includes the step of disposing an outer layer on the intermediate layer.

29. The method of creating a tube of claim 28, wherein the steps further including the step of indicating the location of the at least one extension,

30. A medical device, comprising:

- a) a tube, the tube having a lumen extending therethrough, the lumen having an inner wall;
- b) the lumen and having a plurality of extensions and apertures extending therethrough, the extensions and apertures engaging each other adjacent the inner wall.

31. A medical device, comprising:

a tube formed from a sheet of biomaterial, the tube having a lumen having a lumen wall;  
said lumen wall free from any continuous seam edge traversing the entire length of the tube.

32. The medical device of claim 31, wherein the lumen wall presents a plurality of longitudinal seam edges.

33. The medical device of claim 32, wherein said seams are formed by intersections of edge portions of said sheet of biomaterial and non-edge portions of said sheet of biomaterial.

34. The medical device of claim 33, wherein said edge portions are formed at apertures in said sheet of biomaterial.

35. The medical device of claim 33, wherein said tube comprises a plurality of extensions extending through a plurality of corresponding apertures in said biomaterial.

36. The medical device of claim 33, wherein said edge portions are formed at a perimeter of said sheet of biomaterial.

37. The medical device of claim 36, wherein said tube comprises a plurality of interleaving extensions of said biomaterial.

38. The medical device of claim 31, wherein said tube comprises a seam formed by a butt joint.

→ 39. The medical device of any of claims 31-38, wherein said biomaterial is collagenous.

40. The medical device of claim 39, wherein said biomaterial is a collagenous extracellular matrix.

41. The medical device of claim 40, wherein said biomaterial is submucosa.

42. A medical device, comprising:

a tube formed with a sheet of biomaterial, the tube having a lumen; and

said lumen having a discontinuous seam.

43. The medical device of claim 42, wherein said discontinuous seam includes a plurality of seams each formed by edge portions of said biomaterial in contact with non-edge portions of said biomaterial.

44. The medical device of claim 42 or 43, wherein said biomaterial is collagenous.

45. The medical device of claim 44, wherein said biomaterial includes submucosa.

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